Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Presently amended) A method for use with a touch sensitive device comprising a touch plate to which a plurality of sensors are coupled, the method comprising:

generating, in response to a touch to the touch sensitive device, sensor signals exhibiting dispersion;

correcting for the dispersion in the sensor signals to produce dispersion corrected signals;

determining a location of the touch using the dispersion corrected signals;

determining dimensions of the touch plate and reconstructing impulses representative of impulses generated by the touch to the touch sensitive device using the determined touch plate dimensions; and

confirming the location of the touch using the reconstructed impulses.

2. (Original) The method of claim 1, wherein reconstructing the impulses further comprises determining a dispersion relation of the touch plate.

3. (Canceled).

4. (Presently amended) The method of claim 1 ~~3~~, wherein determining the dimensions of the touch plate comprises using an excitation transducer coupled to the touch plate and the plurality of sensors to determine the dimensions of the touch plate.

5. (Original) The method of claim 4, wherein determining the dimensions of the touch plate comprises:

applying an excitation signal generated by the excitation transducer to the touch plate and sensing the excitation signal by each of the sensors;

determining a transfer function of an input at the excitation transducer to an output at each of the sensors;

determining, for each of the sensors, a dispersion corrected impulse response using the transfer function; and

determining the dimensions of the touch plate using the respective dispersion corrected impulse responses.

6. (Original) The method of claim 1, wherein reconstructing the impulses comprises:

determining a separation distance between the touch location and each of the sensors;

developing, for each of the sensors, an inverse phase factor using the respective separation distances; and

applying the inverse phase factor to the sensor signals to reconstruct the impulses.

7. (Original) The method of claim 1, wherein confirming the location of the touch comprises assessing similarity of one or more features of the reconstructed impulses.

8. (Original) The method of claim 7, wherein assessing similarity of the reconstructed impulses comprises:

confirming the touch location as valid in response to the similarity assessment achieving a threshold; and

considering the touch location as invalid in response to the similarity assessment failing to achieve the threshold.

9. (Original) The method of claim 1, wherein confirming the location of the touch comprises assessing synchronicity of the reconstructed impulses.

10. (Original) The method of claim 1, wherein confirming the location of the touch comprises assessing time of arrival and shape of each of the reconstructed impulses.

11. (Original) The method of claim 1, wherein confirming the location of the touch comprises:

computing an average of the reconstructed impulses to emphasize a particular feature of the reconstructed impulses; and

assessing similarity of the particular feature of the reconstructed impulses.

12. (Original) The method of claim 1, wherein confirming the location of the touch comprises:

computing an average of the reconstructed impulses;

applying a scaling factor to the computed average of the reconstructed impulses to produce a scaled reconstructed impulse, the scaling factor selected to emphasize first arrival energy of the averaged reconstructed impulses; and

comparing the scaled reconstructed impulse against a threshold to confirm the touch location as valid or invalid.

13. (Original) The method of claim 1, wherein sensor signals are generated in response to a touch to a bezel or frame of the touch sensitive device, and confirming the location of the touch comprises confirming the touch to the bezel or frame as an erroneous touch.

14. (Presently amended) A touch sensitive apparatus, comprising:

a touch plate;

a plurality of sensors coupled to the touch plate, each of the sensors configured to sense bending waves in the touch plate and, in response to a touch to the touch plate, generate sensor signals;

an excitation transducer coupled to the touch plate and configured to induce bending waves in the touch plate, wherein the sensors produce induced bending wave signals responsive to the induced bending waves; and

a controller coupled to the sensors, the controller correcting for dispersion in the sensor signals, determining a location of the touch using the dispersion corrected signals, computing dimensions of the touch plate using the induced bending wave signals, and

reconstructing impulses representative of impulses generated by the touch to the touch sensitive device using the touch plate dimensions, the controller confirming the location of the touch using the reconstructed impulses.

15. (Original) The apparatus of claim 14, further comprising a plurality of active buffer circuits, each of the active buffer circuits respectively coupled to one of the sensors.

16. (Canceled).

17. (Canceled).

18. (Presently amended) ~~The apparatus of claim 14, further comprising:~~ A touch sensitive apparatus, comprising:

a touch plate;

a plurality of sensors coupled to the touch plate, each of the sensors configured to sense bending waves in the touch plate and, in response to a touch to the touch plate, generate sensor signals;

a plurality of active buffer circuits, each of the active buffer circuits respectively coupled to one of the sensors; ~~and~~

an excitation transducer coupled to the touch plate and configured to induce bending waves in the touch plate; and

a controller coupled to the sensors via the active buffer circuits and coupled to the excitation transducer via a non-actively buffered connection, the controller correcting for dispersion in the sensor signals, determining a location of the touch using the dispersion corrected signals, and reconstructing impulses representative of impulses generated by the touch to the touch sensitive device, the controller confirming the location of the touch using the reconstructed impulses.

19. (Original) The apparatus of claim 14, wherein the controller determines a dispersion relation of the touch plate, the controller using the dispersion relation to reconstruct the impulses.

20. (Original) The apparatus of claim 14, wherein the controller accesses data corresponding to dimensions of the touch plate and a dispersion relation of the touch plate, the controller using the data corresponding to the touch plate dimensions and dispersion relation to reconstruct the impulses.

21. (Original) The apparatus of claim 14, wherein the controller determines a separation distance between the touch location and each of the sensors, and develops an inverse phase factor associated with each of the sensors using the respective separation distances, the controller applying the inverse phase factor to the sensor signals to reconstruct the impulses.

22. (Original) The apparatus of claim 14, wherein the controller determines similarity of one or more features of the reconstructed impulses to confirm the location of the touch.

23. (Original) The apparatus of claim 22, wherein the controller confirms the touch location as valid in response to the similarity determination achieving a threshold and verifies the touch location as invalid in response to the similarity determination failing to achieve the threshold.

24. (Original) The apparatus of claim 14, wherein the controller evaluates synchronicity of the reconstructed impulses to confirm the location of the touch.

25. (Original) The apparatus of claim 14, wherein the controller evaluates time of arrival and shape of each of the reconstructed impulses to confirm the location of the touch.

26. (Presently amended) A touch sensitive apparatus comprising a touch plate to which a plurality of sensors are coupled, the apparatus comprising:

means for generating sensor signals in response to a touch to the touch sensitive device;

means for correcting for dispersion in the sensor signals to produce dispersion corrected signals;

means for determining a location of the touch using the dispersion corrected signals;

means for reconstructing impulses representative of impulses generated by the touch to the touch sensitive device, wherein the reconstructing means comprises means for determining dimensions of the touch plate; and

means for confirming the location of the touch using the reconstructed impulses.

27. (Original) The apparatus of claim 26, wherein the reconstructing means comprises means for determining a dispersion relation of the touch plate.

28. (Canceled).

29. (Presently amended) The apparatus of claim 26 ~~28~~, wherein the dimensions determining means comprises means for applying an excitation signal to the touch plate and means for sensing signals responsive to the excitation signal.

30. (Original) The apparatus of claim 26, wherein the confirming means comprises means for assessing similarity of one or more features of the reconstructed impulses.

31. (Original) The apparatus of claim 30, wherein the assessing means comprises means for confirming the touch location as valid in response to the similarity assessment achieving a threshold and for considering the touch location as invalid in response to the similarity assessment failing to achieve the threshold.

32. (Original) The apparatus of claim 26, wherein the confirming means comprises means for assessing synchronicity of the reconstructed impulses.